Blueair Sales Guide 2012

The Blueair Air Purifier Sales Guide 2012

The Blueair Air Purifier Sales Guide has been designed for you to use as a tool for training purposes and/or for working with potential customers interested in our line of air purifiers. It is designed to fit into a binder so that new information or additional information on new products can be added as it becomes available.

Table of Contents

Blueair – The company	3
16-Year Milestone – Blueair 1996-2012	4
Air pollution	6
Selecting an air cleaner: Assessing potential performance	8
High performance indicators	10
Types of air cleaners available	11
HEPASilent™ filtration technology	13
Ten reasons to buy a Blueair – List of unique selling points	15
Blueair selling points	17
Specifications of Blueair models	19
Blueair compared to competing air purifiers	21
Frequently asked question	22
User manuals	28
Contact Information	34

Blueair – The Company

As the world's leading premium air purifier company, Blueair makes a significant and sustainable impact on creating healthier and more enjoyable indoor environments, at home and at work. Thanks to our commitment to quality, energy efficiency and environmental care, our products deliver more clean air for enhanced user health, wellbeing, alertness and comfort faster than any competing air purifier. Our products also help individuals relieve the discomfort of allergy and asthma symptoms and can enhance respiratory health by efficiently and silently remove 99.97% of everything potentially harmful in the indoor air people breathe, encompassing allergens, asthma triggers, viruses, bacteria and other airborne pollutants.

Blueair was founded in Sweden in 1996 and quickly earned a reputation for high performance, technological innovation and quality design. Today there are over 50 international dealers representing our line worldwide in Asia, Europe, Americas, Australia and the Middle East. The headquarters is in Stockholm, Sweden and two Blueair offices are also located in Chicago, Illinois USA, servicing North and South America, and in Shanghai, China, servicing China.

16-Year Milestone – Blueair 1996-2012

1996 The HEPASilent™ technology is developed and Blueair AB is established in Sweden.

1997 Dealer network is formed in Scandinavia. First Blueair air purifier, 401, is introduced.

1998 The 501 is developed with 58 m^2 (624 sq. ft.) room capacity, one of the largest room capacities on the market at the time. Blueair receives the Excellent Swedish Design Award, one of the most prestigious design awards in Scandinavia.

1999 Blueair, Inc. is formed in Chicago, Illinois, USA, as a subsidiary of Blueair AB. Association of Home Appliance Manufacturers (AHAM) in the United States develops Clean Air Delivery Rate (CADR), a voluntary performance measurement rating system.

2000 Distribution network established in United States through vacuum specialty stores. Blueair enters Asian market. A new industry standard is set by the 501 when achieving the highest CADR ever measured.

2001 Line expands with the introduction of 301 and upgraded 402 as medium capacity air purifiers.

2002 Larger capacity 601 with room capacity of 63 m^2 (678 sq. ft.) is developed and introduced. The 601 gets highest CADR rating ever recorded. Blueair continues expansion into Asian, European and Middle Eastern markets.

2003 The 501 improves results by a 25% increase in airflow, more efficient charging of particles and higher electrostatic filter technology. The 601 sets a new standard for excellence in tests by U. S. publication Consumer Reports at a high speed.

2004 Blueair becomes the first air purifier brand to have all units certified by ENERGY STAR®.

2005 The 201 air purifier is introduced.

2006 Blueair's dedication to innovation is apparent with the introduction of the Blueair 250E, the first Blueair unit with electronic control. Blueair personal air purifier was developed for people on the go to allow consumers to create their own personal clean air zone.

2007 ECO10, the most energy efficient air purifier in the world, is introduced in the United States.

2008 Electronic control is introduced to Blueair's other popular models and receive the designations: Blueair 450E, 550E and 650E.

2009 The Blueair 200, 300, 400, 500 and 600 Series are enhanced with new and improved filters and a filter replacement indicator. These models receive the designations: Blueair 203, 303, 403, 503 and 603.

2010 Model 650E attained the highest possible CADR rating by AHAM. Blueair sponsored the Swedish Pavilion at EXPO 2010 in Shanghai, China.

2011 First European nationwide exclusive distributor starts up in United Kingdom for responsibility of the British and Irish market.

Air pollution

Clean air consists of nitrogen, oxygen and noble gases. But the air we breathe consists of more, it is contaminated with air pollution. Air pollution is either of particle matters or gaseous matters. Particle matters include dust, pollen, pet dander, allergens, dust mites and their feces, bacteria, virus, fungus and mold spores and other lung damaging particles. Gaseous matters include smoke, VOCs, odors formaldehyde and ammonia.

Air pollution is implicated in a wide range of illnesses from irritating to severely debilitating and even fatal.

Particle sizes

The particles that we see for example in the stream of light from the sun are only a small part of what the air consists of. Airborne particle pollutants are measured in microns. To give perspective, one micron is 1/1000th of a millimeter. A sharp pencil point is about 50 microns in diameter and human hairs are between 30 and 120 microns. The eye can see to around 40 microns.

There are basically three size ranges of indoor pollutants:

- Large range

  Large particles are greater than 1.0 micron in size and include dust and pollen. These particles tend to fall out of the room air quickly, settling on furniture and floor. Particles of this size are a less serious health hazard in that the cilia (hairs) that line our noses and our sinuses catch these particles before they enter our lungs.

- Medium range

  Medium range particles consist of pollutants that are 0.3 to 1.0 micron in size e.g. bacteria. Particles of this size present the greatest health risk in that they remain airborne for long periods of time, are small enough to pass the cilia (hairs) in our sinuses but too large to be easily exhaled again. These particles become lodged in our lung tissue and are implicated in a wide variety of asthma, allergy, respiratory and other serious illnesses.

- Small range

  Small range particles are smaller than 0.3 micron in size and include smoke and viruses. These particles are so small that they are easily inhaled and then exhaled again. However, these small particles can also become lodged in lung tissue and create serious health concerns.

For the reasons noted above, it is very important that an air purifier is able to filter particles 0.3 micron and smaller in size. Blueair air purifiers filter indoor pollutants to a 99.97% efficiency at 0.1 micron – higher than most other air cleaners.

Blueair air purifiers and dust

As noted before, dust particles are so large and heavy that they tend to fall out of the room air quickly. In addition, if inhaled, dust particles are prevented from entering the lungs by the cilia (hairs) lining the sinuses. Blueair air purifiers are not designed to prevent dust from settling on furniture, but rather to remove airborne pollutants (smaller microns) from the air before you inhale them to reduce health concerns. The Blueair air purifiers also assist in reducing dust fallout, especially when used at the higher speeds. But, they should not be purchased primarily as a dust reduction tool. Using a Blueair can be part of a dust reduction strategy when used with high efficiency furnace filters and high filtration vacuum cleaners to remove surface dust from your environment.

Selecting an air cleaner: Assessing potential performance

Air cleaning is one of three methods recommended by US Environmental Protection Agency (EPA) used for reducing pollutants in indoor air. In order of effectiveness, the three methods are:

1. Removal of the source or control of its emissions
2. Ventilation
3. Air cleaning

Removal or control of sources and good ventilation systems are not always easy choices, especially in major urban areas. Air cleaning is then a simple and proven alternative adjunct. Although, remember that air cleaning alone cannot adequately remove all pollutants typically found in indoor air.

Who should use an air cleaner?

Many factors need to be considered in determining whether use of an air cleaner is appropriate in a particular setting. Therefore, the decision whether or not to use an air cleaner should be left to the individual.

Major factors

The following major factors that affect the performance of an air cleaner should be advised before purchase.

- Efficiency

  The percentage of particles removed from the air as it goes through the air cleaner.

- Airflow

  The amount of air handled by the device per time unit. As the air constantly is bombarded with air pollution, high filter efficiency may not be enough if only small amounts of air are processed at a time. Especially if pollutants are generated quicker than they are removed. The more air that passes the unit, the faster is the air cleaned in the room.

- Room volume

  The effective volume of the air to be cleaned. For example, a single portable unit used in a room within a large building in which the air flows, for example between several apartments or several offices, would be of little or no value.

Other important factors

Factors other than the ability to reduce airborne pollutant concentrations are also important when purchasing air cleaners.

- Installation, use and need for maintenance

  Air cleaning units may have certain installation requirements that must be met, such as an adequate and accessible power supply or the need for access during use, repairs, or maintenance. After installation, operating and maintenance procedures specified by the manufacturer need to be followed to assure adequate performance of the air cleaner. Filters must be cleaned or replaced and plates or charged media of electronic air cleaners must be cleaned, sometimes frequently.

- Cost

  Major costs include the initial purchase of the air purifier, maintenance costs such as cleaning and/or replacement of filters and other parts, and operating costs, for example electricity.

- Production of pollutants

  Another consideration to consider in selecting an air purifier is whether some units produce new pollutants or re-disperse old ones. The potential for ion generators and electronic air cleaners to produce ozone, a lung irritant, may be of concern, particularly if electronic air cleaners are not properly installed and maintained. However, at least two manufacturers of portable units openly advertise in the United States that their products produce ozone to facilitate removal of harmful gases. The levels produced by these devices and the possible health effects are not known.

- Ability to remove odors

  Some air cleaners that are able to reduce the levels of tobacco particles in the air are not able to remove the odor from the smoke. This depends on that many air cleaners do not contain effective systems to remove the gaseous pollution in tobacco smoke. The ability to remove odors are especially important in high pollution areas that suffer from automotive exhaust fumes or are located near heavily traveled areas such as major highways.

- Noise

  Noise may be a problem with air cleaners containing a fan. Some portable units operating at high speed can produce noise equivalent to a vacuum cleaner. Even at low speeds, many competing units produce an annoying hum or whine.

Conclusion

The value of any air cleaner depends upon a number of factors including its basic efficiency, proper selection for the type of pollutant to be removed, proper installation in relation to space, and faithful maintenance. Features vary with the type or brand. Factors that should be considered include if adequate pollutant removal, if re-dispersement of pollutants, if deceptive masking rather than removal of pollutants, if generating ozone and if unacceptable noise levels.

High performance indicators

Clean Air Delivery Rate (CADR)

Most air purifiers are certified by the Association of Home Appliance Manufacturers (AHAM) with Clean Air Delivery Rate (CADR). If a unit is not AHAM certified, this should raise a warning signal about the unit.

CADR measures the performance of an air purifier and is an important feature consumers can use worldwide to compare different brands of air purifiers. The CADR is a rating determined by AHAM that reflects how fast a unit removes airborne pollutants such as dust, pollen and tobacco smoke from a room by indicating how much 100% clean air is delivered. The higher the CADR, the faster is the unit able to filter the air in a particular room.

For example, if an air cleaner has a CADR of 375 cfm for tobacco smoke particles (as the Blueair 503 does), it will reduce smoke particle levels to the same concentration as would be achieved by adding 375 cu. ft. of 100% clean air every minute. Each model's performance has been independently verified through testing at a third party laboratory.

Model	Dust (cfm)	Pollen (cfm)	Smoke (cfm)	Room size
203i	115	115	115	20 m^2 (210 sq. ft.)
270E	135	135	135	20 m^2 (210 sq. ft.)
403	240	240	240	34 m^2 (370 sq. ft.)
450E	240	240	240	34 m^2 (370 sq. ft.)
503	375	375	375	54 m^2 (580 sq. ft.)
603	>400	415	>450	60 m^2 (640 sq. ft.)
650E	>400	>450	>450	65 m^2 (698 sq. ft.)
ECO10	195	190	200	28 m^2 (298 sq. ft.)

To read more about CADR and see the ratings of all certified air purifiers, go to:
http://cadr.org/consumer-certified.htm

ENERGY STAR®

ENERGY STAR is a program that certifies products for low energy consumption and running cost. When ENERGY STAR measures the energy efficiency of an air purifier, not only wattage is taken into account but also the performance in comparison to the energy consumption.

Blueair was among the first air purifier brand to get ENERGY STAR designation for all units. Blueair air purifiers significantly exceed minimum standards and with the ECO10, Blueair has the most energy efficient air purifier in the world.

Go to this website to read more:
http://www.energystar.gov/index.cfm?c=room_airclean.room_airclean

Types of air cleaners available

Air purification is not just important to people who suffer from allergies and asthma. It is also very beneficial to anybody concerned about his or her general health. Air is our most important provision and we spend 90 percent of our time indoors. Indoor air pollution is among the top five environmental risks to public health. In addition to the effects indoor air pollution has on asthma and allergy suffers, other long term effects include eye, nose and throat irritation, dizziness, fatigue, pneumonitis, respiratory diseases, heart disease and even cancer.

Types

Air cleaners are typically classified by the technology employed to remove particles of various sizes from the air. There are four general types of air cleaners on the market. They include:

1. Mechanical filters
2. Electrostatic air cleaners
3. Ion generators
4. Ozone generators

Mechanical filters

Mechanical filters may be installed in ducts in homes with central heating and/or air-conditioning or may be used in portable devices that contain a fan to force air through the filter. Mechanical filters used for air cleaning are of two major types:

- Flat filters

  Efficiently collect large particles, but remove only a small percentage of respirable size particles.

- Pleated/Extended surface filters

  Generally attain a greater efficiency for capturing respirable size particles than flat filters. The pleated filter allows greater surface area which in turn allows the use of higher efficiency filter media without a too large drop in airflow rate.

Mechanical filters can achieve very high efficiency, like HEPA filters, but often the dense packed filter gives high energy consumption and noise levels.

Electrostatic air cleaners

Electronic air cleaners use an electrical field to trap charged particles. In electrostatic precipitators, particles are collected on a series of flat plates. In charged-media filter devices, the particles are collected on the fibers in a filter. Electrostatic air cleaners clean the air silently with low energy consumption. However, the electrical field can emit ozone as by product. Read further for health effects of ozone.

Ion generators

Ion generators also use static charges to remove particles from indoor air. They act by dispersing ions into the air that charge particles in the room. The charged particles are attracted to surfaces such as walls, floors, tabletops, draperies and room occupants. Some devices contain a collector to attract the charged particles and keep them contained. Ion generators are relatively ineffective in removing large particles such as pollen and house dust allergens. Also there is no air flow which results in a slow cleaning process.

Ozone generators

Ozone generators release ozone freely into the air and because of the highly reactiveness to other chemical compounds, it can reduce gaseous pollution from the air.

Consumer Reports, a well respective consumer publication in the United States, the National Institute of Occupational Safety and Health (NISHA) in the USA and the Environmental Protection Agency of the United States conclude that tabletop and room unit ozone generators are not effective in improving air quality. Studies have shown that while some air pollutant concentrations decline in the presence of ozone, other pollutants increase.

Current evidence of the health effects of ozone suggests there is no “safe” threshold level of ozone, above exposure to background levels. The bottom line is that ozone generators and negative ion generators may produce levels of ozone recognized as unsafe for humans and are not recommended by the sources noted above for use in occupied spaces because of the risks.

Ozone

According to the American Lung Association (ALA) in the United States, “ozone is a potent lung irritant and exposure to elevated levels is a contributor to the exacerbation of lung diseases; it is especially dangerous for persons with asthma and other chronic lung diseases, children and the elderly.”

Under certain use conditions ozone generating air cleaners can produce levels of this lung irritant significantly above levels harmful to human health.

Blueair air purifiers do not emit ozone. In fact, testing has shown that in rooms where a Blueair is operating, ozone levels actually decrease.

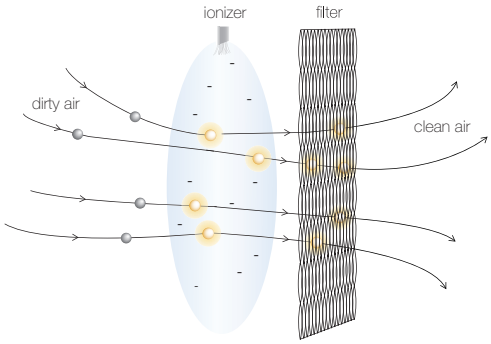
Gaseous removal

In addition to particle removal devices, air cleaners may also contain absorbents and/or reactive materials to facilitate removal of gaseous materials from indoor air. Air cleaners that do not contain these types of materials will not remove gaseous pollutants.

HEPASilent™ filtration technology

All Blueair air purifiers feature exclusive patented HEPASilent™ filtration technology for outstanding filtration efficiency, as well as extremely quiet and energy efficient operation.

The typical air cleaner traps particles using only one type of technology. The secret of Blueair is the use of special filter material and an ozone-free electrostatic ionizer that charges particles so they are electrostatically attracted to the filter material.

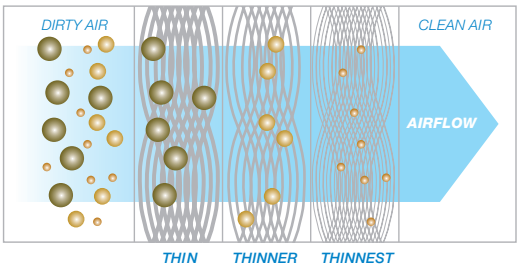


Air is drawn in to the purifier where the particles pick up an electrical charge. The charged particles are then effortlessly captured in the special designed filter.

Blueair uses a progressive filter structure. Most filters from other manufacturers use a thinner filter that consists of the same size of fiber throughout. Blueair filters have millions of ultra-fine fibers in different sizes with decreasing size the deeper in the media. Thus, the name progressive. This leads to that the filters resist loading or clogging and continue filtration at peak performance levels longer.

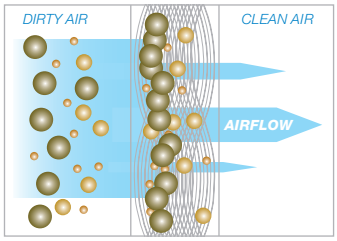
To give an example we have illustrated filtration through a gradient structured filter with different fiber sizes (1), representing the Blueair filters, and another filter with only one fiber size (2) as traditional HEPA filters. Notice the airflow before and after the filter:

(1)



Blueair's gradient structured and progressive filter consists of different sizes of fibers, allowing maximum airflow and resistance to clogging while keeping high efficiency.

(2)



Traditional HEPA filters consist of only one size of fiber, resulting in decreased airflow and clogging.

Progressive and HEPASilent™ filtration technology explains how Blueair traps more particles using filters that are less dense than other air cleaners by adding electrostatic air cleaning. Since air flows more easily through the Blueair, it cleans larger volumes of air with far less noise than other types of air cleaners. Thus, the name HEPASilent™.

Noise Level

Due to the unique HEPASilent™ filtration technology, the Blueair is one of the quietest mechanical air purifier on the market. This is because the exclusive filters allow the fan to work less hard to move the air through the filter while also using an extra quiet, noise-reducing motor. Our air purifier also features all steel construction to reduce vibration and noise.

In direct comparative, noise testing of our unit and other mechanical air cleaners, the Blueair units were found to be the quietest.

Filters

The filters used in Blueair are different from typical air cleaners in that they contain no glass fibers or triclosan. The Blueair filters are hydrophobic (water resistant), so they cannot be a breeding ground for microbial contaminants.

There are two types of Blueair filter available:

- Particle Filter

  For airborne pollutant removal of such as mold, dust, pollen, bacteria, viruses and pet dander. Mild odor control. This filter allows maximum filter efficiency and airflow.

- SmokeStop™ Filter

  For heavy-duty odor control and airborne gaseous removal of such as VOCs, formaldehyde, tobacco smoke, ammonia and ozone. The SmokeStop™ filters are enhanced with active carbon and have maximum odor and gas reduction.

To maintain incredibly high levels of clean air, the filters in air purifiers need to be changed regularly. Blueair filters should be changed once every six months or even sooner if the air in the room is excessively dirty. Filters kept in the unit longer than the recommended time period will still provide some level of filtration, but nothing up to the specifications and capabilities of the unit. The pollution restricts the airflow and decreases therefore the CADR.

Ten reasons to buy a Blueair – List of unique selling points

1. Blueair is the highest rated air purifier in the industry.

Blueair units are one of the highest performing air purifiers on the market which is shown by its ratings from AHAM, highest CADR. Blueair 650E has higher CADR than what can be measured.

2. Patented HEPASilent™ filter technology.

Blueair delivers maximum airflow of clean air with minimum noise thanks to the exclusive HEPASilent™ technology:

Air is drawn into the Blueair system through an ultra-quiet fan. Airborne particles pass an ionizer and get an electrostatic charge. This causes them to cling effortlessly to our gradient structured polypropylene filter media (odors are absorbed by the carbon medium in the SmokeStop™ filter that is available as option). This is why Blueair captures smaller particles more efficiently than standard HEPA filters or ion generators without high-pressure drop and high noise levels.

3. Near silent operation.

Noise levels at HEPASilent™ mode are as low as 32 dB(A) for all Blueair units. The quiet operation allows running the unit in bedrooms at nighttime, without disturbing the sleep.

4. Highest quality product and components.

Blueair housings are made of galvanized steel, rather than less durable plastic, assuring reliable performance. Units sold from the first batch ever made are today, over 15 years later, still running and supplied with filters.

5. Low energy consumption

Blueair was the first air purifier brand to have all units certified by the ENERGY STAR®. Depending on the unit, Blueair uses from 10 to 120 Watts on maximum speed. Blueair ECO10 is the world's most energy efficient air purifier.

6. Award winning Swedish design

The sleek contemporary design fits any interior décor.

7. Easy to change filters

No tools required.

8. Unobtrusive

The unit can be placed up against a wall.

9. Easy to move around

Blueair units come with wheels (larger capacity models) or with handles (smaller capacity models).

10. Zero Ozone Emission

The use of active ionization (particle charging) to capture particles should not be associated with dangerous indoor ozone. Tests show that our systems ozone concentration is actually lower than incoming air. Blueair units are continuously tested to meet safety limits of ozone emission levels.

Blueair selling points

Blueair air cleaners are top-of-the-line in the premium segment of the air purifier market. The following are some of the main selling points to consider:

Top CADR rating

Blueair's line of air purifiers have among the highest AHAM ratings in the industry. Ratings are updated once every six months. CADR takes into account the size of the particle removed, what percentage of particles are removed and the volume of air that actually moves through the system. The higher the CADR, the faster the unit filters the air.

Coverage

The Blueair 600 Series covers rooms up to 65 m^2 (698 sq. ft.); the 500 Series 54 m^2 (580 sq. ft.); the 400 Series 34 m^2 (370 sq. ft.) and the 200 Series 20 m^2 (210 sq. ft.). All ratings are based on a ceiling height of 2.4 meters. As a note, the Blueair Personal Clean Air Zone covers 3 m^2 (32 sq. ft.) of the personal space on for example the desktop at the office.

HEPASilent™ technology

Blueair air purifiers use patented HEPASilent™ technology, a revolutionary combination of advanced filter media and ion particle charging. This makes it possible for Blueair to achieve better results than either mechanical or electrostatic technology alone. Particles are electrostatically charged as they enter the unit and then effortlessly captured in the filter with the efficiency of 99.97% down to 0.1 micron in size. The filter itself is a special material that has low resistance to air pressure. This means that by charging the particles and using a special filter material, the filter can capture more contaminants with low air pressure. As a result, the motor does not have to work as hard to pass air through the filters. Thus, the unit is extremely quiet and use very low energy.

Quietness

Blueair units have multiple speeds. Highest speed is recommended for initial cleaning or much polluted air for accelerated air exchanges to quickly reduce indoor pollutants. Daily operation, filtration is practically silent in the room as the unit should be set to lower speeds or for electronic series to auto speed that automatically can monitor your air quality. On the first two speeds, the unit is virtually inaudible. There is even a special sound insulating motor mounting system to further reduce audible sounds.

Energy Efficient

All Blueair air purifiers are very energy efficient. Power consumption ranges from 7 to 120 Watts, depending on the speed selected. Blueair ECO10 use only 10 Watts at the highest speed.

The energy consumption of air purifiers should always be in relation to the amount of clean air delivered (CADR). The ECO10 produces 19 cfm per Watt, best in the industry!

Quality

Blueair products are noted for outstanding quality. The galvanized steel construction of the Blueair units, rather than plastic, means that they are incredibly durable and environmentally friendly. Blueair uses a special motor for near silent operation with many years of trouble-free service. Also the polypropylene filters are resistant to fiber shedding.

Filters

The unique gradient and progressive structured filters of Blueair are made of polypropylene, a plastic material that is naturally anti-bacterial, fiber shedding resistant and when combusted, the filters converts to harmless water and carbon dioxide. The filters achieve maximum filter efficiency and maximum airflow. Blueair SmokeStop™ filter allows maximum gas and odor reduction.

Changing filter is done in seconds. Simply open the unit, slide out the soiled filter and replace with a new one.

Design

The Blueair design is sleek and contemporary and has won the most prestigious award in Scandinavia, the Excellent Swedish Design award. Its flat panel design allows for greater placement options, such as placing against a wall. Rolling casters or handles allow easily moving the Blueair from room to room. A Blueair model is on permanent display at the National Museum in Stockholm, Sweden.

Air Changes/Hour (ACH)

Dirt and dust are continuously introduced into the room environment. In order to keep the air clean the air purifier must filter the air frequently. The frequent, the better. Depending on the room size and unit used, our air purifier changes the air from less than 5 up to over 21 times an hour. The smaller the room size, the faster the air in the entire room will be cleaned.

SurroundAir™

The larger room capacity 500/600 Series and ECO10 have a feature called Surround Air™. With Surround Air™, virtually no noticeable draft is produced like so many other brands of air purifiers that discharge a windy stream of air. Instead, air is diffused gently without any annoying drafts. Dirty air is drawn in from the sides and bottom and clean, filtered air is released from the sides and top.

Specifications* of Blueair models

Model	Blueair 650E	Blueair 603	Blueair 503
Photo			
Room size	698 sq. ft. (65 m²)	640 sq.ft. (60 m²)	580 sq.ft. (54 m²)
CADR (Clean Air Delivery Rate)			
Smoke	>450 (>765 m³/h)	415 (705 m³/h)	375 (638 m³/h)
Dust	>400 (>680 m³/h)	>400 (>680 m³/h)	375 (638 m³/h)
Pollen	>450 (>765 m³/h)	415 (705 m³/h)	375 (638 m³/h)
Air changes per hour (ACH)**	5 (698 sq.ft. room) 5 (65 m² room)	5 (640 sq.ft. room) 5 (60 m² room)	5 (580 sq.ft. room) 5 (54 m² room)
Airflow	90–490 cfm 150–830 m³/h	90–455 cfm 150–770 m³/h	90–415 cfm 150–705 m³/h
Size (HxWxD)	26 x 20 x 13 in. 660 x 500 x 340 mm	26 x 20 x 13 in. 660 x 500 x 340 mm	26 x 20 x 13 in. 660 x 500 x 340 mm
Product weight	35 lbs (16 kg)	35 lbs (16 kg)	35 lbs (16 kg)
Energy consumption (watts)	35 to 120	35 to 120	35 to 120
Noise level dB(A)	32–66	32–66	32–66
Electronic sensor with remote	Yes	No	No
Filter replacement indicator	Yes	Yes	Yes
On/Off timer	Yes	No	No
Speed control options	Auto	4	4
Caster	Yes	Yes	Yes
Air outlet	SurroundAir™ Top & Sides	SurroundAir™ Top & Sides	SurroundAir™ Top & Sides
Air inlet	Bottom & Sides	Bottom & Sides	Bottom & Sides

* Specifications based on US version models, 120 VAC, 60 Hz, fitted with Particle filters

** Air changes per hour are calculated on the recommended room size, assuming 8-foot (2.4 m) ceilings. For smaller rooms, the air changes per hour will increase.

Blueair 450E	Blueair 403	Blueair ECO10	Blueair 270E	Blueair 203i
365 sq.ft. (34 m²)	370 sq.ft. (34 m²)	300 sq.ft. (28 m²)	210 sq.ft. (20 m²)	210 sq.ft. (20 m²)
240 (408 m³/h)	240 (408 m³/h)	190 (323 m³/h)	135 (230 m³/h)	135 (230 m³/h)
240 (408 m³/h)	240 (408 m³/h)	195 (331 m³/h)	135 (230 m³/h)	135 (230 m³/h)
240 (408 m³/h)	240 (408 m³/h)	200 (340 m³/h)	135 (230 m³/h)	135 (230 m³/h)
5 (365 sq.ft. room) 5 (34 m² room)	5 (370 sq.ft. room) 5 (34 m² room)	5 (300 sq.ft. room) 5 (28 m² room)	5 (210 sq.ft. room) 5 (20 m² room)	5 (210 sq.ft. room) 5 (20 m² room)
75–280 cfm 130–475 m³/h	75–280 cfm 130–475 m³/h	100–230 cfm 170–390 m³/h	60–150 cfm 100–255 m³/h	60–150 cfm 100–255 m³/h
23 x 20 x 11 in. 590 x 500 x 275 mm	23 x 20 x 11 in. 590 x 500 x 275 mm	26 x 20 x 13 in. 660 x 500 x 340 mm	21 x 17 x 10 in. 533 x 432 x 241 mm	21 x 17 x 10 in. 533 x 432 x 241 mm
33 lbs (15 kg)	33 lbs (15 kg)	35 lbs (16 kg)	25 lbs (11 kg)	25 lbs (11 kg)
30 to 80	30 to 80	7 to 10	20 to 80	20 to 80
32–52	32–52	40–49	32–56	32–56
Yes	No	No	Yes	No
Yes	Yes	Yes	Yes	Yes
Yes	No	No	Yes	No
Auto	4	3	Auto	3
No – Handles	No – Handles	Yes	No – Handles	No – Handles
Side	Side	SurroundAir™ Top & Sides	Top	Top
Side	Side	Bottom & Sides	Back	Back

Blueair compared to competing air purifiers

The following chart compares the largest capacity models of Blueair and other competing air purifier brands. Note the obvious difference; Blueair 650E has largest capacity with much higher performance and airflow while consuming about the same energy and giving away about the same noise levels. Also, Blueair 650E is the most energy efficient, (highest CADR/Watt).

Model		Blueair 650E	Sharp FP-A80U	Honeywell 50250	IQAir HealthPro Plus
Airflow		90-490 cfm (150-830 m^3/h)	71-318 cfm (121-540 m^3/h)	N/A	40-240 cfm (68-408 m^3/h)
Recommended room size according to AHAM		65 m^2 (698 sq. ft.)	42 m^2 (454 sq. ft.)	36 m^2 (390 sq. ft.)	38 m^2* (409 sq. ft.)*
CADR:	Dust	>400 cfm	303cfm	250 cfm	N/A
	Pollen	>450 cfm	360 cfm	250 cfm	N/A
	Smoke	>450 cfm	293 cfm	250 cfm	265 cfm*
CADR/Watt		3.3	3.1	1.5	1.2
Filtration technology		HEPASilent™	HEPA	HEPA	HEPA
Ionization		Yes	Yes	No	No
Filtration of particle matters		Yes (highest efficiency with Particle filter)	Yes	Yes	Yes
Filtration of gaseous matters		Yes (highest efficiency with SmokeStop™ filter)	Yes	Yes	Yes
Whole system filter efficiency		99.97% at 0.1 micron, (speed1)	99.97% at 0.3 micron	99.97% at 0.3 micron	99.97% at ≥ 0.3 micron
ENERGY STAR		Yes	Yes	No	No
Energy consumption		35-120W	5-98W	50-170W	215W (max. speed)
Noise level at min/max speed		32/66 dB(A)	23/55 dB(A)	35/57 dB(A)	44/72 dB(A)
Meets ozone emission limit		Yes	Yes	Yes	Yes
Sensors		Gas and particle	Dust	No	No
Air quality indicators		Yes	Yes	No	No
Filter exchange indicator		Yes	No	Yes	Yes
Speed settings		3 + Auto	3 + Auto	3	6
Remote control		Yes	No	No	Yes
Material of unit		Metal	Plastic	Plastic	Plastic
Dimension of unit		66 x 50 x 34 cm 26 x 20 x 13 in.	41 x 24 x 62 cm 16 x 9.5 x 24 in.	46 x 46 x 50 cm 18 x 18 x 20 in.	71 x 38 x 41 cm 28 x 15 x 16 in.

* IQAir is not rated by AHAM. Numbers are from testings performed in accordance with the CADR program (ANSI/AHAM AC-1-2006) at a third party laboratory.

Frequently asked questions

As a Blueair salesman you will get questions from customers about Blueair and air cleaning. We have answered some of the most common questions:

1. "Which Blueair unit is best for me?"
2. "Do Blueair air purifiers produce dangerous levels of ozone?"
3. "What type of Blueair filter do I need?"
4. "How does a Blueair filter compare with a traditional HEPA filter?"
5. "How can I justify the high investment for an air purifier?"
6. "How does HEPASilent™ technology achieve such high levels of filtration?"
7. "If I operate the unit 24 hours a day, seven days week, will my power bill skyrocket?"
8. "My bedroom is 40 m^2. Why would I spend the extra money on a Blueair air purifier designed for 54 or 60 m^2 room?"
9. "Will I notice a difference in air quality when I use a Blueair air purifier?"
10. "Can Blueair systems trap airborne bacteria?"
11. "How often should I change the filter in my Blueair unit?"
12. "How can I get the most from my Blueair air purifier?"
13. "Do I need to run it on high speed all the time to keep the room clean?"

1. "Which Blueair unit is best for me?"

The answer to this question is simple; it's a matter of comfort. The Blueair 500 and 600 Series have the highest rated room capacity on the market. But if size of the unit or cost is a factor, then the Blueair 400 or 200 Series may be better choices. For a small area, such as over your desk while working, the Personal Clean Air Zone is an option. Each Blueair model uses HEPASilent™ filtration technology to achieve 99.97% efficiency at 0.1 micron.

The Association of Home Appliance Manufacturers (AHAM), an independent industry organization in the United States that rates air cleaners for overall performance, assigns room size recommendations to air cleaners as another way of comparing the different brands. The Blueair room size recommendations are based upon this testing by AHAM. If cost or size is the major purchasing factor, consumers should select the system that matches their room size. All room sizes assume 2.4 meter high ceilings. If ceilings are higher, consumers should select the system that matches the next larger room size.

Room Size	Best Blueair Unit
Up to 65 m^2 (698 sq. ft.)	Blueair 600 Series
Up to 54 m^2 (580 sq. ft.)	Blueair 500 Series
Up to 34 m^2 (365 sq. ft.)	Blueair 400 Series
Up to 28 m^2 (300 sq. ft.)	Blueair ECO10
Up to 20 m^2 (210 sq. ft.)	Blueair 200 Series

2. “Do Blueair air purifiers produce dangerous levels of ozone?”

The answer is NO. The U.S. government’s most stringent ozone safety is set by the U.S. Food and Drug Administration (FDA) to a threshold of 50 ppb (parts per billion). In a closed test room with a Blueair in operation, probes measured ozone levels at 1 ppb – a tiny fraction of the amount deemed hazardous to human health. Blueair’s design and steel housing chamber safeguards against excessive ozone production, and then removes ambient ozone from the air. Testing shows the ozone concentration in our system’s output air is actually lower than the incoming air.

3. “What type of Blueair filter do I need?”

Filter type is based on the kinds of pollutants (particles and gases) that may be present in the environment. Blueair’s standard HEPASilent™ filter provides efficient filtration for environments where particles are the primary concern and gases are secondary. This filter is suitable not only for average home or apartment with family members in good overall health, but also for families who need an extra level of protection for the elderly, children, or those with respiratory or cardio-vascular illness.

For any environment in which removing gaseous pollutants (including tobacco smoke) is a priority, Blueair recommends its optional SmokeStop™ filter. Blueair’s optional SmokeStop™ filter adds more gas absorption capability and is recommended for removal of tobacco smoke and for environments like workshops or workplaces where chemical fumes and gases are present.

4. “How does a Blueair filter compare with a traditional HEPA filter?”

Most filters from other air purifier manufacturers are thinner and usually consist of the same type fiber throughout. Blueair filters are progressive with millions of ultra-thin fibers in different sizes. The first layers in filters by Blueair are of thicker fibers. The deeper in the media, the thinner are the fibers. The thinner the fibers, the denser packed are they and the smaller particles are captured. For example, large particles such as pollen and dust are captured in the first layers while small particles such as bacteria and exhaust fumes are captured in the deepest layers.

Whereas a traditional HEPA filter often clogs and as a consequence restricts airflow, our filter design resists loading or clogging and continues filtration at peak performance levels longer. In essence, our filters offer maximum airflow and high efficiency. Also, once captured by our filter, the particles will not be re-released into your environment, even under heavy loading conditions.

5. “How can I justify the high investment for an air purifier?”

Since indoor air pollution is among the top five environmental risks to public health, the investment in an air purifier could be considered as an investment in the health and well-being of the customer. If the customer has respiratory ailments such as asthma or allergies, an air purifier will also provide relief for sufferers by eliminating dust, pollen and smoke particles from the air. An air purifier can also provide relief at night by controlling airborne particles that might disrupt the sleep. Removing these particles will also make homes smell better. If the customer is allergic to pets, it also helps control pet dander.

6. “How does HEPASilent™ technology achieve such high levels of filtration?”

   A revolutionary combination of advanced filter media and an encapsulated ion particle charging chamber makes it possible for the Blueair air purification system to achieve better results than either mechanical or electrostatic technology alone.

   The Blueair system moves all particles through a sealed ion chamber where they collide with negative ions and pick up a very slight electrical charge. As they exit the ion chamber, particles are electrostatically attracted to the pleats of the HEPASilent™ filter media. Rather than floating past the filter media, particles are captured and removed from the indoor air.

   Most electrostatic systems charge the fibers of the filter media itself, rather than the particles. The charge naturally dissipates over time and renders the filter media less efficient. By constantly electrostatically charging incoming particles, instead of the filter media, HEPASilent™ technology continues working effectively and reliably. In addition, Blueair uses a very low electrical current to minimize ozone production.

7. “If I operate the unit 24 hours a day, seven days week, will my power bill skyrocket?”

   Blueair units use an extremely low amount of power. Operating a Blueair unit is very economical and cost-efficient. At low speed it costs about the same as using an electric light bulb at home.

8. “My bedroom is 40 m^2. Why would I spend the extra money on a Blueair air purifier designed for 54 or 60 m^2 room?”

   60 m^2 (640 sq. ft.) is the maximum room size AHAM recommends for the Blueair 603 air purifier. A maximum of 54 m^2 (580 sq. ft.) is recommended for the 503. If the room in which the 503 or 603 are placed is smaller than recommended, the room will be cleaned more efficiently. In addition, less power will be consumed, with the possibility for less required filter changes and the likelihood of even cleaner air.

9. “Will I notice a difference in air quality when I use a Blueair air purifier?”

   Yes, depending on how contaminated the air was prior to using the Blueair air purifier. If the room has pet dander and tobacco smoke particles, the difference in air quality could be noticeable within a few hours. The room will smell cleaner and fresher. If the customer suffers from allergies/asthma related to dust and/or pollen, the customer should also notice a definite improvement in his/her condition. Obviously, the more use of the Blueair air purifier, the better the results.

10. “Can Blueair systems trap airborne bacteria?”

    The answer is a qualified “yes”. No air filtration system is 100% effective at removing 100% of all bacteria and viruses. However, Blueair’s combination of mechanical and active electrostatic filtration provides exceptionally high levels of protection. Blueair’s HEPASilent™ technology traps

and removes 99.97% of airborne particles as small as 0.1 micron. Testings at Kitasato Research Center of Environmental Sciences of the Blueair 650E has shown that the unit actually reduces the air from bacteria and viruses with 99% in only ten minutes.

The Blueair filters contain polypropylene, a hydrophobic material that prevents bacteria, viruses and mold growth.

11. "How often should I change the filter in my Blueair unit?"

In order to maintain the high performance standard you expect from Blueair, it is recommended that the filter be replaced every six months or sooner if the unit operates in a particularly dirty environment. The amount of indoor air pollution can vary dramatically from environment to environment. Without regular filter replacement, the air cleaner is operating at only a small percentage of optimum performance.

Many air purifiers have longer periods of recommended filter change. But in time they will clog and restrict the airflow which in turn lowers the CADR.

12. "How can I get the most from my Blueair air purifier?"

Blueair air purifiers are easy to use. Begin by selecting the right size unit that corresponds to the room size. The filter should be replaced at the recommended 6-month intervals. Every air purification system has limits to the volume of air it can clean, so it is important to follow these common sense guidelines:

- Close windows

  An air conditioner is not expected to work efficiently on a hot summer day with windows open, as hot air would come in and cool air would go out the window. The same logic applies here even though contaminated air coming in and clean air going out the window isn't visible.

- Close doors

  Just as the customer might expect to seal off part of their house when it's cool outside to keep their heater working more efficiently, they should seal off the room in which the system is working for best results. This is especially important for people using a Blueair system to ease nighttime asthma or allergy attacks.

- Operate the system 24 hours a day

  Blueair systems are designed for phenomenally low power usage, so the system can be run 24 hours a day, seven days a week without an increase in electricity consumption. It costs approximately the same to power one Blueair unit as it does to power a single light bulb depending on the unit and the operating speed.

- Vacuum "fluff"

  If visible "fluff" builds up on the outside of the air intake and outtake grids, it is simply vacuumed away or wiped clean with a cloth. The air take grid is designed in part to intercept very large

particles before they enter the system, thereby prolonging the life of the filter. The air intakes and grids should be checked regularly for removal of “fluff”.

13. “Do I need to run it on high speed all the time to keep the room clean?”

No. The air purifier should operate at high speed when it’s initially placed in a room for about an hour to rid the room of impurities. After the initial cleaning of the room, the unit can operate on a lower speed to maintain the desired clean air levels in the room. A person who smokes or has pets should operate the unit on a higher speed compared to a non-smoker and person who does not have pets.

User manual

The following instructions are rendered in the user manuals. They are good to know for general safety instructions, settings, how the units work and how to change filters.

General safety instructions

Blueair air purifiers are electrical appliances. Please read the safety instructions before use and take the necessary precautions to reduce the risk of fire, electric shock or injury. The Blueair Limited Warranty applies only if the unit is used according to these instructions.

- Use the grounded power cable provided with your Blueair unit. The plug fits into a grounded outlet. Do not alter the plug in any way.
- Use the cable provided to plug the Blueair unit directly into an appropriate electrical outlet (please refer to the voltage label on your unit). The cable is packaged beneath the unit.

This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety.
Children should be supervised to ensure that they do not play with the appliance. If the supply cord is damaged, it must be replaced by the manufacturer or its service agent or similarly qualified persons in order to avoid a hazard.

Placement

Place the unit in a location that allows air to circulate freely in, out and around the unit. The minimum acceptable distance from another object is 4” or 10 cm. Use only genuine Blueair filters. Do not place the unit:

Directly on or against soft furnishings, such as bedding or curtains.

Near sources of heat, such as radiators, fireplaces or ovens.

Near wet areas, such as bathrooms or laundry rooms, where it may come into contact with water.

Outdoors.

Manual settings

Plug the power cable firmly and completely into the recessed power cord socket located at the bottom of the unit and plug the other end into a grounded wall outlet or power strip. Turn on your Blueair unit. The blue light-emitting diode indicates that the unit is working. Set the control knob to maximum

speed, which is recommended for fast initial cleaning, daytime use, or much polluted air. After a few minutes, adjust the control to the desired speed. Minimum speed is generally recommended for nighttime use.

E Series settings

- Power On/Off

  Press the green “Power” key to turn the unit on and off. The unit automatically runs on the highest speed for fi ve minutes after it is turned on to provide fast initial cleaning and then switches to Auto Mode.

- Speed

  Press the “Speed” key to regulate operating speed manually.

  – Use Speed 1 for nighttime use.
  – Use Speed 2 for daytime use.
  – Use Speed 3 for fast initial cleaning or for larger rooms.
  – Use Auto Mode to let the electronic gas and particle sensors automatically adjust the operating speed according to the level of particles and gaseous compounds in the air.

- Preset

  When the unit is turned off, use the “Preset” key on the remote control to set “On Time”, “Off Time“ and “Speed”.

  – “On Time”
  Press the “Preset” key once. Set the “On Time” by using the plus (+) and minus (–) keys to add or subtract time in intervals of 30 minutes. The display will indicate the amount of time (for instance, 1 for one hour) and count down to zero, when the unit will turn itself on.

  – “Off Time”
  Press the PRESET key again. Set the OFF TIME using the plus (+) and minus (–) keys to add or subtract time in intervals of 30 minutes. The display will indicate the amount of time (for instance, 4 for four hours) until the unit will turn itself off. If ON TIME is set at 1 and OFF TIME is set at 4, the unit will turn on after 1 hour and turn off after 4 hours of operation.

Care and maintenance

Blueair air purifiers feature high quality design, materials and workmanship. To keep your unit in top condition, we recommend routine cleaning. The appliance must be disconnected from the supply mains before cleaning or maintenance.

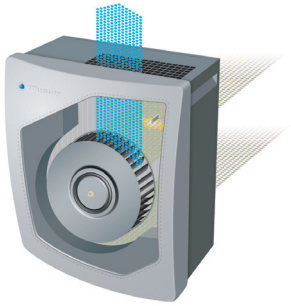
- Vacuum the air intake grille from the inside when you remove the filters to replace them.
- Vacuum the small inlets with a soft brush attachment.
- Wipe the exterior of the unit with a soft, clean, damp cloth.
- Never clean with gasoline, chemical solvents or corrosive material also as these agents may damage the surface.

- Do not allow foreign objects to enter the ventilation or exhaust openings. This may cause electric shock or damage the unit.
- Do not try to repair or adjust any of the electrical or mechanical functions on your Blueair unit yourself. Contact your local dealer or Blueair for warranty information.

How it works

- 200 Series

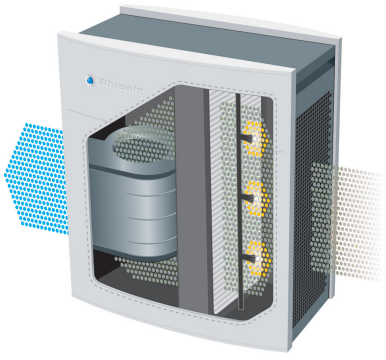
  Filtered air leaving the unit from the exhaust grille is charged with negative ions. The ions collide with and charge airborne particles in the room. When air is drawn into the unit again, the HEPASilent™ filter traps the charged particles.



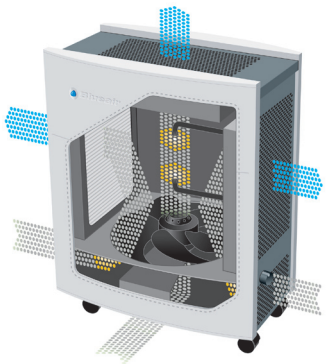
200 Series

- 400/500/600 Series and ECO10

  Air passes through an ion chamber where airborne particles are charged with negative ions. Charged particles are drawn to the HEPASilent™ filter surface. Purified air, which is virtually contaminant-free, is re-circulated into the room.



400 Series

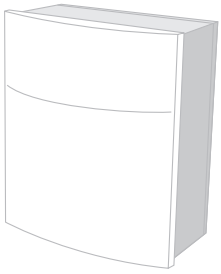


500/600 Series and ECO10

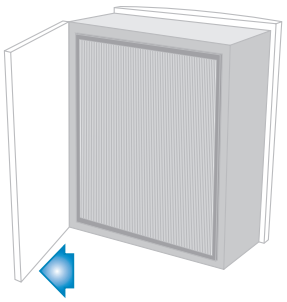
Changing the filters

200 Series

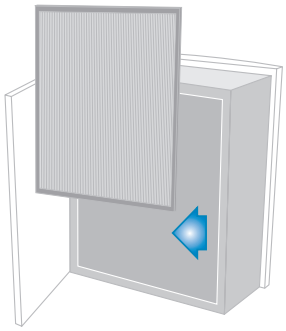
Step 1
Unplug the unit.



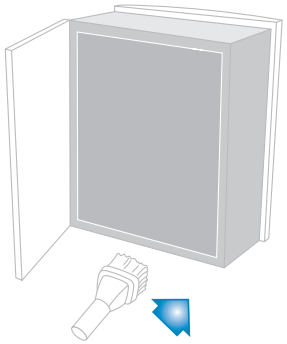
Step 2
Open the door.



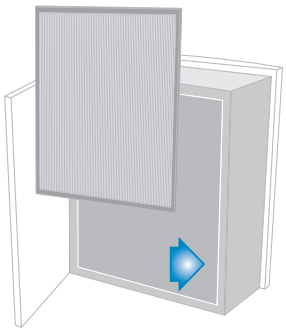
Step 3
Slide out the old Blueair filter.



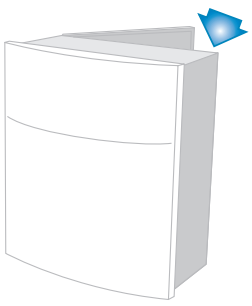
Step 4
Vacuum inside the unit with a soft brush attachment.



Step 5
Slide in the new Blueair filter.

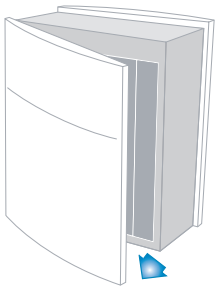


Step 6
Close the door, plug in the unit and turn it back on.

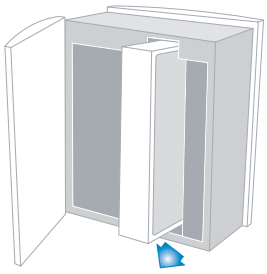


400 Series

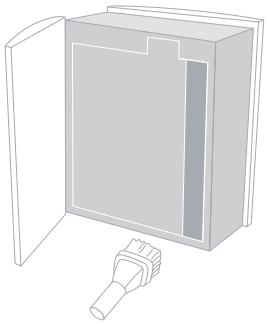
Step 1
Unplug the unit and open the door.



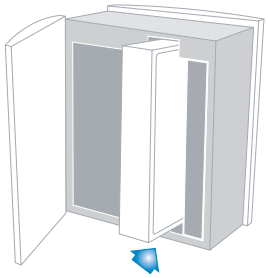
Step 2
Slide out the old filter.



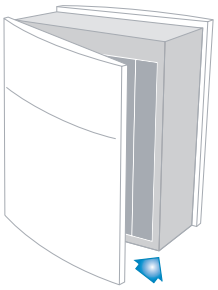
Step 3
Using a soft brush attachment, vacuum the inside chamber.



Step 4
Slide in the new Blueair filter.

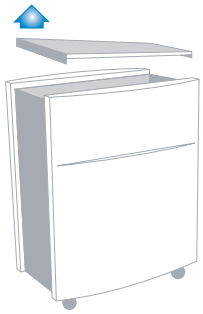


Step 5
Close the door and plug in your unit.
Ready for use!

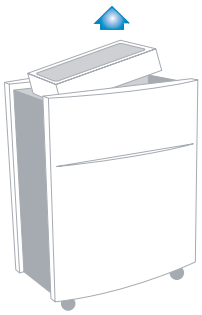


500/600 Series and ECO10

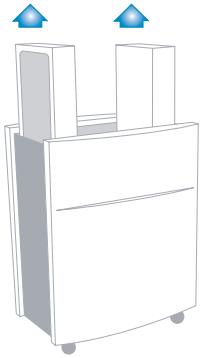
Step 1
Unplug the unit and lift the lid from the top of the unit.



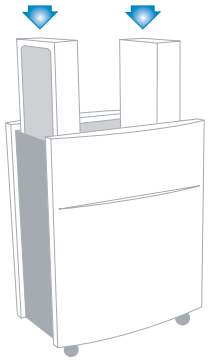
Step 2
Remove the filter on top.



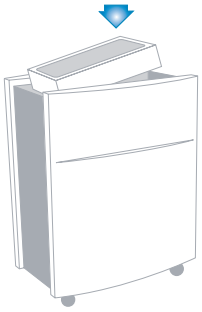
Step 3
Remove the filters on each side. Vacuum the grille from the inside.



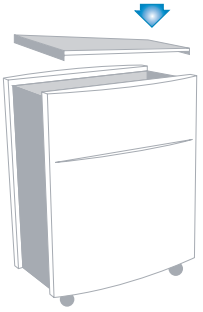
Step 4
Guide the first and second replacement filters into the side slots. Ensure that the side with the words out/up is turned toward the outer wall of the unit.



Step 5
Place the third filter on top of the unit and ensure that the side with the words out/up is facing upwards. Make sure that the carbon side is always facing out.



Step 6
Snap the lid back into place.



Contact us

We hope that this Sales Guide is helpful to you. Marketing resources can be downloaded from our dealer extranet. If you wish to get access the dealer extranet, write an e-mail to info@blueair.se or contact us at:

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